# APR 1 2000 B

09820149.ST25.txt SEQUENCE LISTING

```
<110> Gellman,
      Appella, Daniel H
      Lee, Hee-Seung
      LePlae, Paul
      Porter, Emilie
      Wang, Xifang
Woll, Matthew
<120> Beta-Amino Acids
<130> 09820.149
<140> 09/833,496
<141> 2001-04-11
<150> 09/034,509
<151> 1998-03-04
<150> 09/464,212
<151> 1999-12-15
<150> 60/039,905
<151> 1997-03-04
<160> 17
<170> PatentIn version 3.1
<210> 1
<211>
      4
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
<220>
<221> MISC_FEATURE
<222>
      (1)..(1)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE.
<222>
      (2)..(2)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (3)..(3)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC FEATURE
<222> (4)..(4)
```

```
09820149.ST25.txt
<223> 2-aminocyclopentanecarboxylic acid
<400> 1
Xaa Xaa Xaa Xaa
<210> 2
<211>
      6
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
<220>
<221> MISC_FEATURE
<222>
      (1)..(1)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (2)..(2)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (3)..(3)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE (222> (4)..(4)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (5)..(5)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (6)..(6)
<223> 2-aminocyclopentanecarboxylic acid
<400> 2
Xaa Xaa Xaa Xaa Xaa
```

```
09820149.ST25.txt
<210> 3
<211>
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
<220>
<221> MISC_FEATURE
<222>
      (1)..(1)
<223> 2,5-diaminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (3)..(3)
<223> 2,5-diaminocyclohexanecarboxylic acid
<220>
<221> MISC FEATURE
<222>
      (5)..(5)
<223> 2,5-diaminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (2)..(2)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (4)..(4)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (6)..(6)
<223> 2-aminocyclohexanecarboxylic acid
<400> 3
Xaa Xaa Xaa Xaa Xaa
<210> 4
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
```

· <220>

```
09820149.ST25.txt
<221> MISC FEATURE
<222>
      (1)..(1)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (2)..(2)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE <222> (3)..(3)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (4)..(4)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (5)..(5)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC FEATURE
<222>
      (6)..(6)
<223> 2-aminocyclohexanecarboxylic acid
<400> 4
Xaa Xaa Xaa Xaa Xaa
<210> 5
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> 2-amino-4-pyrrolidinecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (3)..(3)
<223> 2-amino-4-pyrrolidinecarboxylic acid
```

Page 4

4

```
<220>
 <221> MISC_FEATURE
 <222>
        (2)..(2)
 <223> 2-aminocyclopentanecarboxylic acid
 <220>
 <221> MISC_FEATURE
 <222>
        (4)..(4)
 <223> 2-aminocyclopentanecarboxylic acid
 <400> 5
 Xaa Xaa Xaa Xaa
 <210> 6
 <211> 6
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Beta-Polypeptide
 <220>
 <221> MISC_FEATURE
 <222> (1)..(1)
 <223> 2-amino-4-pyrrolidinecarboxylic acid
 <220>
 <221> MISC FEATURE
 <222> (3)..(3)
 <223> 2-amino-4-pyrrolidinecarboxylic acid
 <220>
 <221> MISC FEATURE
 <222> (5)..(5)
 <223> 2-amino-4-pyrrolidinecarboxylic acid
 <220>
 <221> MISC_FEATURE
 <222> (2)..(2)
 <223> 2-aminocyclopentanecarboxylic acid
 <220>
 <221> MISC FEATURE.
. <222>
       (4)..(4)
 <223> 2-aminocyclopentanecarboxylic acid
```

<220>

# 09820149.ST25.txt <221> MISC\_FEATURE <222> (6)..(6)<223> 2-aminocyclopentanecarboxylic acid <400> 6 Xaa Xaa Xaa Xaa Xaa <210> 7 <211> 8 <212> PRT <213> Artificial Sequence <220> <223> Beta-Polypeptide <220> <221> MISC\_FEATURE <222> (1)..(1) <223> 2-amino-4-pyrrolidinecarboxylic acid <220> <221> MISC\_FEATURE <222> (3)..(3) <223> 2-amino-4-pyrrolidinecarboxylic acid <220> <221> MISC\_FEATURE <222> (5)..(5) <223> 2-amino-4-pyrrolidinecarboxylic acid <220> <221> MISC\_FEATURE <222> (7)...(7)<223> 2-amino-4-pyrrolidinecarboxylic acid <220>

<223> 2-aminocyclopentanecarboxylic acid

THE PARTY

<220> <221> MISC FEATURE

<221> MISC\_FEATURE <222> (2)..(2)

 $\langle 222 \rangle$  (4) ... (4)

<223> 2-aminocyclopentanecarboxylic acid

<220>

<221> MISC\_FEATURE

<222> (6)..(6)

<223> 2-aminocyclopentanecarboxylic acid

```
<220>
 <221> MISC_FEATURE
  <222>
        (8)..(8)
 <223> 2-aminocyclopentanecarboxylic acid
 <400> 7
 Xaa Xaa Xaa Xaa Xaa Xaa
 <210> 8
 <211> 8
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Beta-Polypeptide
 <220>
 <221> MISC_FEATURE
 <222>
       (1)..(1)
 <223> 2-amino-5-pyrrolidinecarboxylic acid
 <220>
 <221> MISC_FEATURE
 <222>
       (3)..(3)
 <223> 2-amino-5-pyrrolidinecarboxylic acid
 <220>
 <221> MISC_FEATURE
 <222> (5)..(5)
 <223> 2-amino-5-pyrrolidinecarboxylic acid
 <220>
 <221> MISC_FEATURE
 <222> (7)..(7)
 <223> 2-amino-5-pyrrolidinecarboxylic acid
 <220>
 <221> MISC_FEATURE
 <222> (2)..(2)
 <223> 2-aminocyclopentanecarboxylic acid
 <220>
 <221> MISC_FEATURE
<222>
        (4)...(4)
 <223> 2-aminocyclopentanecarboxylic acid
```

· <220>

```
09820149.ST25.txt
<221> MISC_FEATURE
<222>
       (6)..(6)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
       (8)..(8)
<223>
       2-aminocyclopentanecarboxylic acid
<400> 8
Xaa Xaa Xaa Xaa Xaa Xaa Xaa
       9
<210>
<211>
       6
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
<220>
<221> MISC_FEATURE
<222>
       (1)..(1)
<223> 3-amino-3-(3-aminopropyl)propionic acid
<220>
<221> MISC_FEATURE
<222>
       (3)..(3)
<223> 3-amino-3-(3-aminopropyl)propionic acid
<220>
<221> MISC_FEATURE
<222>
       (5)..(5)
<223> 3-amino-3-(3-aminopropyl)propionic acid
<220>
<221> MISC_FEATURE
<222>
       (2)..(2)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC FEATURE.
<222>
       (4)..(4)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC FEATURE
<222>
       (6)..(6)
<223> 2-aminocyclohexanecarboxylic acid
```

```
<400> 9
Xaa Xaa Xaa Xaa Xaa
<210> 10
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
<220>
<221> MISC_FEATURE
<222>
      (1)..(1)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (2)..(2)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> 2-aminocyclohexanecarboxylic acid
<400> 10
Xaa Xaa Xaa Xaa
<210> 11
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
<220>
<221> MISC_FEATURE
<222>
      (1)..(1)
<223> 2-aminocyclopentanecarboxylic acid
```

```
<220>
<221> MISC_FEATURE
<222>
      (2)..(2)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
      (3)..(3)
<222>
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (4)..(4)
<223> 2-aminocyclopentanecarboxylic acid
<400> 11
Xaa Xaa Xaa Xaa
<210> 12
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> 1-phenylthio-2-phenylmethyl-beta-amino acid
<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> glycolic acid
<220>
<221> MISC FEATURE
<222>
      (4)..(4)
<223> 1-ethyl-2-methyl-beta-amino acid
<400> 12
Xaa Pro Xaa Xaa
<210> 13
<211> 6
```

```
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
<220>
<221> MISC_FEATURE
<222>
      (1)..(1)
<223> 1-(3-aminopropyl)-beta amino acid
<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> 1-(3-aminopropyl)-beta amino acid
<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> 1-(3-aminopropyl)-beta amino acid
<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> 2-aminocyclohexanecarboxylic acid
<400> 13
Xaa Xaa Xaa Xaa Xaa
<210> 14
<211> 8
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
<220>
<221> MISC FEATURE
<222> (1)..(1)
```

| <223>                            | 3-aminopropanoic                       | acid    | 09820149.ST25.tx |
|----------------------------------|----------------------------------------|---------|------------------|
| <222>                            | MISC_FEATURE (1)(2) 3-aminopropanoic   | acid    |                  |
| <222>                            | MISC_FEATURE (3)(3) 3-aminopropanoic   | acid    |                  |
| <222>                            | MISC_FEATURE (4)(4) 3-aminopropanoic   | acid    |                  |
| <222>                            | MISC_FEATURE (5)(5) 3-aminopropanoic   | acid    |                  |
| <220><br><221><br><222><br><223> | MISC_FEATURE (6)(6) 3-aminopropanoic   | acid    |                  |
| <222>                            | MISC_FEATURE (7)(7) 3-aminopropanoic   | acid    |                  |
| <220><br><221><br><222><br><223> | MISC_FEATURE (8):.(8) 3-aminopropanoic | acid    |                  |
| <400><br>Xaa Xaa<br>1            | 14<br>a Xaa Xaa Xaa Xaa<br>5           | Xaa Xaa |                  |
| <210><br><211><br><212><br><213> | 15<br>10<br>PRT<br>Artificial Sequen   | nce     |                  |
| <220><br><223>                   | Beta-Polypeptide                       |         |                  |
|                                  |                                        |         |                  |

```
<220>
<221> MISC_FEATURE
<222>
      (1)..(1)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (2)..(2)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (3)..(3)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (4)..(4)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (5)..(5)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (6)..(6)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC FEATURE
<222>
      (7)..(7)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC FEATURE
<222>
      (9)..(9)
<223> 2-aminocyclohexanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (10)..(10)
<223> 2-aminocyclohexanecarboxylic acid
```

```
<400> 15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
<210>
      16
<211>
      10
<212> PRT
<213> Artificial Sequence
<220>
<223> Beta-Polypeptide
<220>
<221> MISC_FEATURE
<222>
      (1)..(1)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (2)..(2)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (3)..(3)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (4)..(4)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (5)..(5)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (6)..(6)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
<222>
      (7)..(7)
<223> 2-aminocyclopentanecarboxylic acid
<220>
<221> MISC_FEATURE
```

# 09820149.ST25.txt <222> (8)..(8) <223> 2-aminocyclopentanecarboxylic acid <220> <221> MISC\_FEATURE <222> (9)..(9) <223> 2-aminocyclopentanecarboxylic acid <220> <221> MISC\_FEATURE <222> (10)..(10) <223> 2-aminocyclopentanecarboxylic acid <400> 16 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa <210> 17 <211> 10 <212> PRT <213> Artificial Sequence <220> <223> Alpha-Polypeptide <400> 17

Ala Ala Ala Ala Ala Ala Ala Ala

5